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09/900,251	07/06/2001	Sven Brueckner	ERIO11302/03	5963
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GIFFORD, KRASS, GROH, SPRINKLE & CITKOWSKI, P.C			SINES, BRIAN J	
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Please find below and/or attached an Office communication concerning this application or proceeding.



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**MAILED**  
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**GROUP 1700**

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/900,251  
Filing Date: July 06, 2001  
Appellant(s): BRUECKNER ET AL.

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John G. Posa  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 7/20/2006 appealing from the Office action mailed 1/11/2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

A Notice of Appeal was filed 7/11/2006 for case 10/352,288, which is a continuation-in-part of this case.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

No evidence is relied upon by the examiner in the rejection of the claims under appeal.

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**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1 – 40 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The disclosure does not satisfy the enablement requirement under 35 U.S.C. 112, first paragraph in consideration of the following factors:

- (1) the breadth of the claims;
- (2) the nature of the invention;
- (3) the state of the prior art;
- (4) the level of skill of one of ordinary skill in the art;
- (5) the level of predictability in the art;
- (6) the amount of direction provided by the inventor;
- (7) the existence of working examples; and
- (8) the quantity of experimentation needed to make or use the invention based upon the content of the disclosure. See *In re Wands*, 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988) (see MPEP § 2164.01(a)).

Regarding (1) the breadth of the claims, since the specification does not adequately disclose a specific pump software component, distance software agents, pheromone, walker software component, type of sensor system or control system, which would be correlated and organized to enable each of the elements to form a complete operative system, a person of ordinary skill in the art is not enabled to make and use the entire scope of the claimed invention without undue experimentation (see MPEP § 2164.08).

Regarding (2) the nature of the invention, which is intrinsically related to the state of the prior art, is the subject matter to which the invention pertains and the background required in determining the state of the prior art and level of skill of a person of ordinary skill in the art. The lack of prior art provides evidence to the high degree of unpredictability in the art. The specification fails to bridge the gap between the level of skill of one of ordinary skill in the art, as evidenced by the prior art, and the applicants claimed invention, in order for the claimed system to function properly. For example, it is unclear as to how the pump software components, walker software agents and distance software agents are cooperatively associated, which would enable the claimed system to operate properly (see MPEP § 2164.05(a)).

Regarding (3) the state of the prior art, the lack of prior art pertaining to the subject matter of the application provides evidence for the lack of predictability in the art. Therefore, since the state of the prior art refers to the level of skill of a person of ordinary skill in the art, the specification as filed lacks sufficient direction or guidance required to meet the enablement requirement (see MPEP § 2164.05(a)).

Regarding (4) the level of skill of one of ordinary skill in the art, which refers to the skill of those in the art in relation to the subject matter to which the claimed invention pertains,

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the specification is deemed not enabling to a person skilled in the art, since the specification fails to bridge the gap between the level of skill of one of ordinary skill in the art, as evidenced by the prior art, and the applicants claimed invention, in order for the claimed system to function properly (see MPEP § 2164.05(b)).

Regarding (5) the level of predictability in the art, due to the lack of knowledge in the state of the prior art pertaining to the nature of the invention, there is a high degree of unpredictability in the art (see MPEP § 2164.03).

Regarding (6) the amount of direction provided by the inventor, due to the lack of predictability in the prior art, the specification needs to provide more direction and guidance as to how to make and use the claimed invention. For example, it is unclear as to how the pump software components, distance software agents and walker software components are cooperatively associated, which would enable the claimed system to operate properly (see MPEP § 2164.03).

Regarding (7) the existence of working examples, the invention is not disclosed in such a manner that one skilled in the art would be able to practice the claimed invention without undue experimentation, since the art area is relatively unpredictable and undeveloped. For example, it is unclear as to what kind of control system or sensor system is utilized. The specification provides no guidance or working example as to what constitutes the pump software component recited in the claimed system. How does the distance software component deposit the pheromone? The specification provides no guidance or working example as to what constitutes a pheromone as recited in the claimed system. The specification provides no guidance or working example as to

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what constitutes a walker software component as recited in the claimed system (see MPEP § 2164.02).

Regarding (8) the quantity of experimentation needed to make or use the invention based upon the content of the disclosure, since the applicants specification does not provide adequate direction and guidance in the practicing of the claimed invention, and since the art area is relatively unpredictable and undeveloped, the invention would require an undue amount of experimentation (see MPEP § 2164.06).

#### **(10) Response to Argument**

Regarding (1) the breadth of the claims, the Appellant disagrees with the assertion that the specification does not adequately disclose a specific pump system, pheromone, walker apparatus, type of sensor or control system used to practice the claimed invention. The cited passages in the specification by the Appellant do not support the Appellant's arguments. For example, the first passage cited merely describes how agents, pumps and walker components function, without disclosing how each of the components are programmed to interact in the manner claimed. The second cited passage merely describes a preferred embodiment employing a "pheromone" that is a digital packet of information and the use of a protocol to determine the optimal set of pheromone configurations for a given problem, and including a method of local information content estimation without disclosing how the pump and walker software components are programmed to function in the manner claimed. The specification discloses no computer program code to enable one of ordinary skill in the art to practice the claimed invention. Furthermore, it is unclear as to how the claimed subject matter is utilized in the

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alleged applications involving, for example, the modeling of troop movements, battleground surveillance, fishery migration, pollution monitoring, and search and rescue operations as disclosed in the Appellant's specification (see, e.g., pages 47 and 48).

Regarding (2) the nature of the invention, the Appellant disagrees with the assertion that the lack of prior art provides evidence to the high degree of unpredictability in the art. The Appellant also disagrees that the specification fails to bridge the gap between the level of skill of one of ordinary skill in the art, as evidenced by the prior art, and the applicants claimed invention, in order for the claimed system to function properly. Regarding (3) the state of the prior art, the Appellant asserts that the cited prior art and the specification as filed does offer sufficient direction or guidance required to meet the enablement requirement. In addition, regarding (4) the level of skill of one of ordinary skill in the art, which refers to the skill of those in the art in relation to the subject matter to which the claimed invention pertains, the specification is deemed not enabling to a person skilled in the art, since the specification fails to bridge the gap between the level of skill of one of ordinary skill in the art, as evidenced by the prior art, and the applicants claimed invention, in order for the claimed system to function properly. Furthermore, regarding (5) the level of predictability in the art, due to the lack of knowledge in the state of the prior art pertaining to the nature of the invention, there is a high degree of unpredictability in the art. The prior art cited by the Appellant does not adequately describe how one of ordinary skill in the art could specifically program, or provide the general framework sufficient to program, the pump and walker software components, for example, to be cooperatively associated, which would enable the claimed system to operate in the claimed manner.

Regarding (6) the amount of direction provided by the inventor, the Appellant disagrees that the specification needs to provide more direction and guidance as to how to make and use the claimed invention. For example, it is unclear as to how the pump software components, distance software agents and walker software components are cooperatively associated or programmed, which would enable the claimed system to operate properly. The specification discloses no computer program code to enable one of ordinary skill in the art to practice the claimed invention.

Regarding (7) the existence of working examples, the Appellant asserts that working examples have been implemented and disclosed in the specification. However, the specification does not provide sufficient guidance or working example disclosure as to what constitutes the pump software or walker component as recited in the claimed system. The specification discloses no computer program code for the software objects to enable one of ordinary skill in the art to practice the claimed invention.

Regarding (8) the quantity of experimentation needed to make or use the invention based upon the content of the disclosure, since the Appellant's specification does not provide adequate direction and guidance in the practicing of the claimed invention with regards to each of the software components, and since the art area is relatively unpredictable and undeveloped, the invention would require an undue amount of experimentation.

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**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

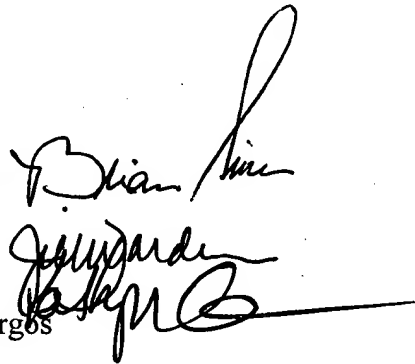
Brian Sines

Conferees:

Brian Sines

Jill Warden

Kathryn Gorgos

The block contains three handwritten signatures. The first signature, for Brian Sines, is a large, stylized cursive 'B' followed by 'rian Sines'. The second signature, for Jill Warden, is a cursive 'Jill Warden'. The third signature, for Kathryn Gorgos, is a cursive 'Kathryn Gorgos' with a long horizontal line extending to the right.